

CHELCOWSKI, W.

The intensity of solar radiation in Krynicz-Zdroj, March 17-April 29, 1953,
p. 277.

Panstwowy Instytut Hydrologiczno-Meteorologiczny. WIADOMOSCI SLUZBY HYDROLOG-
ICZNEJ I METEOROLOGICZNEJ.
Warszawa, Poland. Vol. 6, no. 5, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7, July 1959

Uncl.

CHELCOWSKI, W.

Some Polish actinometric data from the International Geophysical Year. p. 4.

SAZETA OBSERWATORA. P.I.H.M. (Instytut Hydrologiczno-Meteorologiczny) Warszawa,
Poland Vol. 12, no. 5, May 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7, July 1959.

Uncl.

23981

P/027/60/000/004/002/002
D249/D304

3.5000

AUTHOR: Chelchowski, Włodzimierz

TITLE: Humidity measurements at Cha-Pa and Phu-Lien during the IGY

PERIODICAL: Przeglad geofizyczny, no. 4, 1960, 289-294

TEXT: An account is given of the investigations of Polish-Vietnamese meteorological stations at Cha-Pa ($\varphi = 22^{\circ}21' N$, $\lambda = 103^{\circ}50' E$, H = 1578 m) and Phu-Lien ($\varphi = 20^{\circ}48' N$, $\lambda = 106^{\circ}38' E$, H = 113 m) aimed at measuring the frequency of humid days and the degree of humidity, since the latter affects human well-being and health. The data are compared with those obtained at the PIMH Warsaw-Bielany observatory ($\varphi = 52^{\circ}16' N$, $\lambda = 20^{\circ}59' E$, H = 101 m). Both meteorological and catathermometric data from the PIMH station cover the entire IGY (1957-1958), those from Cha-Pa the period between September 1957 and December 1958 (catathermometric from December 1957 only) and those from Phu-Lien the period between August 1957 and December 1958, (catathermometric from April to December 1958)

Card 1/3

Humidity measurements...

23981
P/027/60/000/004/002/002
D249/D304

X

only). Humidity determinations taken at 13.00 hours LT only were considered as the humidity reaches a maximum at that time of day. The measurements were carried out by (a) determining the rate of cooling, (b) the water vapor pressure method and (c) the equivalent temperature method. The three methods are discussed and compared. It is concluded that the rate of cooling method does not provide a time measure of humidity. Similar difficulties were encountered in attempting to define a humid day by measuring the vapor pressure of water, since the values proposed range from 12 to 14.1 mm Hg (at 16.5°C), according to various authors. The results demonstrate that this method gives a truer representation of actual conditions. Equivalent temperatures (T_c), proposed by various authors as a measure of humidity, range from 37 to 70°C, and a value of $T_e \geq 55^\circ\text{C}$ was chosen by the author, thus assuming that humid days only occur when the temperature $> 20.3^\circ\text{C}$. The number of humid days assessed by this method is tabulated as well as the observed values of T_c . Comparison of tables shows that the water vapor pressure and the equivalent temperature methods agree closely at higher values of T_c , but diverge during the colder part of the year. The applicability of the T_e

Card 2/3

23981

F/027/60/000/004/002/002

D249/D304

Humidity measurements...

method as a biometeorological indicator is limited since the effects of air movements are neglected. Wind cooling is however inversely proportional to temperature and may be neglected when the air temperature $\geq 34^{\circ}\text{C}$. Wind velocities up to or even above 7 - 8 m/sec would thus bring little or no relief under such conditions. It is, however, possible that the same may not be true of equatorial regions. Further research is recommended on (1) the range of applicability of the various humidity scales to Polish conditions, (2) the general usefulness of the various parameters, and (3) the effects of humidity on the native and foreign populations in various regions of the world. There are 2 tables and 6 Soviet-bloc references.

ASSOCIATION: PIMH - Warszawa (PIMH - Warsaw)

SUBMITTED: December 15, 1959

Card 3/3

CHELCHOWSKI, W.

"Sultriness, a comparative study" by H. Herrmann. Reviewed by W.
Chelchowski. Przegl geofiz 6 no. 3:209 '61.

CHELCOWSKI, W.

"Climatic discomfort in the Kimberleys" by D Gaffney. Reviewed by
W. Chelkowski. Przegl geofiz 6 no. 3:209-210 '61.

CHELCOWSKI, W.

"Sultriness, a comparative study" by H. Herrmann.
Reviewed by W. Chelkowski. Przegl geofiz 6 no.3:209
'61.

CHELCOWSKI, W.

"Climatic discomfort in the Kimberleys" by D. Gaffney.
Reviewed by W. Chelkowski. Przegl geofiz 6 no.3:209 '61.

CHELCOWSKI, W.

Sultriness in Zakopane. Meteor zpravy 16 no.6:167-168
D '63.

1. Państwowy Instytut Hydrologiczno-Meteorologiczny, Warszawa.

BIERNACKI, Andrzej [deceased]; CHELCOWSKI, Włodzimierz; CZARNECKI, Wincenty; GRZEDZINSKI, Eugeniusz.

Effect of high humidity, a bio-meteorological factor, on patients treated in Ciechocinek during the summer of 1960.
Pol. arch. med. wewnet. 34 no.1:19-32 '64.

1. Z I Kliniki Chorob Wewnętrznych AM w Warszawie (kierownik: prof.dr.nauk med. A.Biernacki [deceased]) i Samodzielnnej Pracowni Biometeorologicznej PIHM w Warszawie (kierownik: prof. dr. S.Zych).

*

ACC-NR: AT6023363

(N)

SOURCE CODE: UR/3174/65/000/055/0045/0050

AUTHOR: Khelkovski, V. (Doctor of geographical sciences) — Chedchowski, W. (Poland)

ORG: Tenth soviet antarctic expedition (Desyataya sovetskaya antarkticheskaya ekspe-
ditsiya)TITLE: Some biometeorological conditions of the voyage of the Tenth soviet antarctic
expedition in the tropicsSOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955- Informatsionnyy byulleten'.
no. 55, 1965, 45-50TOPIC TAGS: tropical ocean climat[?], tropical voyage microclimatology, arctic medicine,
tropic antarctic acclimatization, antarctic acclimatization, stress physiology,
microclimatology, Antarctic climateABSTRACT: The soviet antarctic expedition personnel is subjected during their voyages
thru the tropical zone to the shipboard microclimate of the tropical seas, with high
temperature and humidity. This paper describes the biometeorological investigations
aimed at a determination as to how long did the tropical conditions exist and what were
the micrometeorological parameters of personnel environment on board ship. Air tempe-
rature, wind velocity and water vapor pressure on deck and at various quarters were
measured on the ship "Ob'" from Nov. 29, 1964 to Jan 2, 1965; and on the ship "Estonia"
from Dec 8, 1964 till Jan 10, 1965 during their southward passages. The results are
presented in graphs and tables. The following preliminary conclusions are offered:

Card 1/2

ACC NR: AT6023363

1) both groups of expedition personnel were in the tropical zone 13 days. The voyage of "Estonia was characterized by an abrupt change of air temperature in the passage from the tropical into the antarctic zone, 2) airconditioned living quarters are recommended on tropical voyages, 3) It is advisable to cross the tropics as fast as possible; the shortest passage is usually offered by a meridional course, 4) personnel assigned to intracontinental antarctic stations should be assigned to the ship with the fastest tropical zone crossing. Of course, before proceeding to their final intracontinental stations, the personnel should pass an acclimatization stage at one of the coastal stations.

SUB CODE: 04, 06/ SUBM DATE: 05May65/ ORIG REG: 000 OTH REP: 005

Card 2/2

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

DEMINS, N.S.; MAILIKOV, B.F.; GAPORIANKO, N.M.; CHEL'DIYEV, A.Kh.

Ore chute sinking with the use of suspended cages. Gor. shur. no.1:
34-36 Ja '56. (MLRA 9:5)

(Sedon--Shaft sinking)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

ANTIPOV, N.F.; CHEDOZHEV, A.N.

Decrease of additional losses in a net of the 4th dimension
series of A032 induction motors. Trudy Ural. politekhn. inst.
no. 138;99-106 '64
(NIRA 19:1)

L 01289-67 EWT(1)

ACC NR: AT6010475

SOURCE CODE: UR/2694/64/000/138/0099/0106

38

35

B+1

AUTHOR: Antipov, M. F.; Cheldyshov, A. M.

ORG: none

TITLE: Reducing additional loss in AOL2 size 4 induction motors

SOURCE: Sverdlovsk. Ural'skiy politekhnicheskiy institut, Trudy, no. 138, 1964.
Issledovaniye elektromagnitnykh i elektromekhanicheskikh protsessov mashin
peremennogo toka (Research on electromagnetic and electromechanical processes in
a. c. machines), 99-106

TOPIC TAGS: electric motor, induction motor

ABSTRACT: AOL2 induction motors manufactured by the "Uralelektromotor" plant have an additional loss of 4-7% at rated load, whereas Soviet Standards permit only 0.5%. Oxidation of rotor punchings did not help much in reducing the above loss because the subsequent finishing of the rotor surface short-circuited adjacent punchings through their burrs or cage aluminum. Hence, NaOH-etching of the punchings was tried at the plant. The experimental results obtained with three

Card 1/2

L 01289-67

ACC NR: AT6010475

5

motors (AOLZ 41-2, -4, and -6) are presented. Tables and curves show the effect of etching on the additional (iron) loss and operating characteristics of the above motors. It is found that NaOH-etching (the processing is detailed) is expedient and economical as it enhances the motor efficiency by 2% and improves its starting characteristic at the expense of the power factor (reduces only by 0.012) and the starting torque.

"Technicians N. I. Lambayeva and A. I. Kolchanov took part in testing the motors. Engineer L. P. Kovalevich consulted on chemical treatment of the punchings."

Orig. art. has: 4 figures, 2 formulas, and 4 tables.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 003

Card 2/2 ZC

GULIYEV, A.G., inzh.; CHELDZE, V.S.

Aerodynamic features of the tea flush used in designing
tea harvesting and grading machines. Sel'khozmashina no.7:
13-16 J1 '57. (MIRA 11:1)
(Tea machinery)

SHANTSEV, A.Ye.; CHIKERAYEV, A.I.; GEORGEV, A.R.

New data on the stratigraphy of sedimentary and volcanic Neogene formations in Kamchatka. Dokl. AN SSSR 162 no.6:1382-1385 Ja '65.
(MIRA 18:7)

1. Institut vulkanologii Sibirskego otdeleniya AN SSSR. Submitted
March 19, 1965.

CHELEBIEV, A.

"More Sanitary Care for Workers of Agricultural Enterprises." p. 4,
(ZDRAVEN FRONT, No. 42, Oct. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

CHELEBIEV, A.

SURNAME (in caps); Given Name

Country: Bulgaria

Academic Degrees: not indicated

Member of the staff of Sreden Meditsinski Rabotnik, Editor:

Affiliation: Dr S. AVRAMOV; Head of the Physiotherapeutic Department
of the Balneal Sanatorium in Gorna Banya (Fizioterapevtich-

Source: no Otdelenie v. Balneosanatoriuma Gorna Banya)

Sofia, Sreden Meditsinski Rabotnik, No 1, 1961, pp 25-30

Data: "Prophylactic Treatment and Therapy with Ultraviolet Rays."

CHIELEDINOV, I. I.

**Device for cutting a sloping bossage into a staircase wall made
of gypsum slabs with chamfered edges. Rats. i izobr. predl. v
stroi. no.106:28 '54. (MLRA 8:10)**

(Staircases)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

CHILOMBIY, A.

Frame for information posters. Avt.transp.32 no.12:32 D '54.
(Posters) (MLRA 8:3)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

MUNTIU, N.; CHELEMEN, N.; ANDRIAN, T.; CORNECI, I.; BADITOIU, I.; IUGA, C.

The effect of ionizing radiation on the course and treatment with neosalversan of experimental trypanosomiasis in the rat. Arch. Roum. path. exp. microbiol. 20 no.1:77-85 Mr '61.

1. Travail du Laboratoire de Medecine Veterinaire du Ministere des Forces Armees et de l'Institut de Recherches Pharmaceutiques et pour le controle du Medicament.

(TRYPANOSOMIASIS exper) (RADIATION EFFECTS exper)
(NEOARSPHENAMINE pharmacol)

L 33703-66 T JK
ACC NR AP6025161

SOURCE CODE: RU/0012/65/061/004/0631/0637

AUTHOR: Chelemen, N. (Lieutenant colonel; Veterinarian); Savulescu, M. (Veterinarian; Lieutenant colonel); Vainer, E. (Doctor, Colonel); Strati, I. (Doctor, Lieutenant colonel); Oprescu, C. C. (Doctor)

24

B

ORIGINATOR: none

TITLE: Considerations on the kaolin-agglutination phosphatidic test in the diagnosis of of tuberculous afflictions

SOURCE: Revista sanitara militara, v. 61, no. 4, 1965, 631-637

TOPIC TAGS: tuberculosis, diagnostic medicine, military medicine, kaolin

ABSTRACT: The authors tested the use of kaolin-agglutination phosphatidic tests as a tool for the diagnosis of tuberculous ailments in military personnel, working out the most appropriate procedures and checking the effectiveness of the test through a comparative study on patients with confirmed tuberculous lesions and some with other diseases. The possibility of using this test as a supplementary diagnostic method in guinea pig tests was also studied. Orig. art. has: 3 tables. [JPRS: 33,500]

SUB CODE: 06/ SUM DATE: 22Jun64/ ORIG REF: 005/ OTH REF: 013

Card 1/ P.P.

RUMANIA

CHELEAEN, N., Lieutenant-Colonel, Medical Veterinary Corps; CIORTEA, G., Dr.; and SAVULESCU, M., Lieutenant-Colonel, Medical Veterinary Corps.

"Effect of Gamma Irradiation on the Diagnostic Potentialities of Some Biological Products"

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1965; pp 505-508

Abstract: Study of effects of radiation on brucellar antigen and on immunogenicity of tuberculin in guinea pigs. The brucellar antigen irradiated 10^5 r changed in agglutinability, became unsuitable for diagnostic use. The tuberculin was unaffected for all practical purposes. 3 tables.

1/1

- 90 -

RUMANIA

CHELEMEN, N., Veterinarian, Lt-Col, SAVULESCU, M., Veterinarian, Lt-Col, TUDOR, V., Dr. COI, STRATI, I., Dr, Lt-Col, and EDU, E., Dr [affiliation not given]

"Studies on the Incidence of Serum Antibodies Against Some Zoonotic Agents for Two Outbreaks of Epidemic Hepatitis"

Bucharest, Revista Sanitara Militara, Vol 62, No 2, Mar-Apr 66, pp 359-364

Abstract: A study of 73 sera from hepatitis patients, of which some were from a closed focus and some were individual cases, showed the presence of antibodies against Rubarth contagious canine hepatitis in one case, against pararickettsia in two cases; antibodies against leptospira were not found in any of the sera. The authors conclude that the incidence of these zoonotic agents in epidemic hepatitis outbreaks is minimal.

Includes one table and 21 references, of which 15 Rumanian, one German, and 5 Western. Manuscript submitted 6 August 1965.

1/1

ADERCA, I.; IFTIMOVICH, Magda; NACHTIGAL, M.; CHELERTER, Luigina

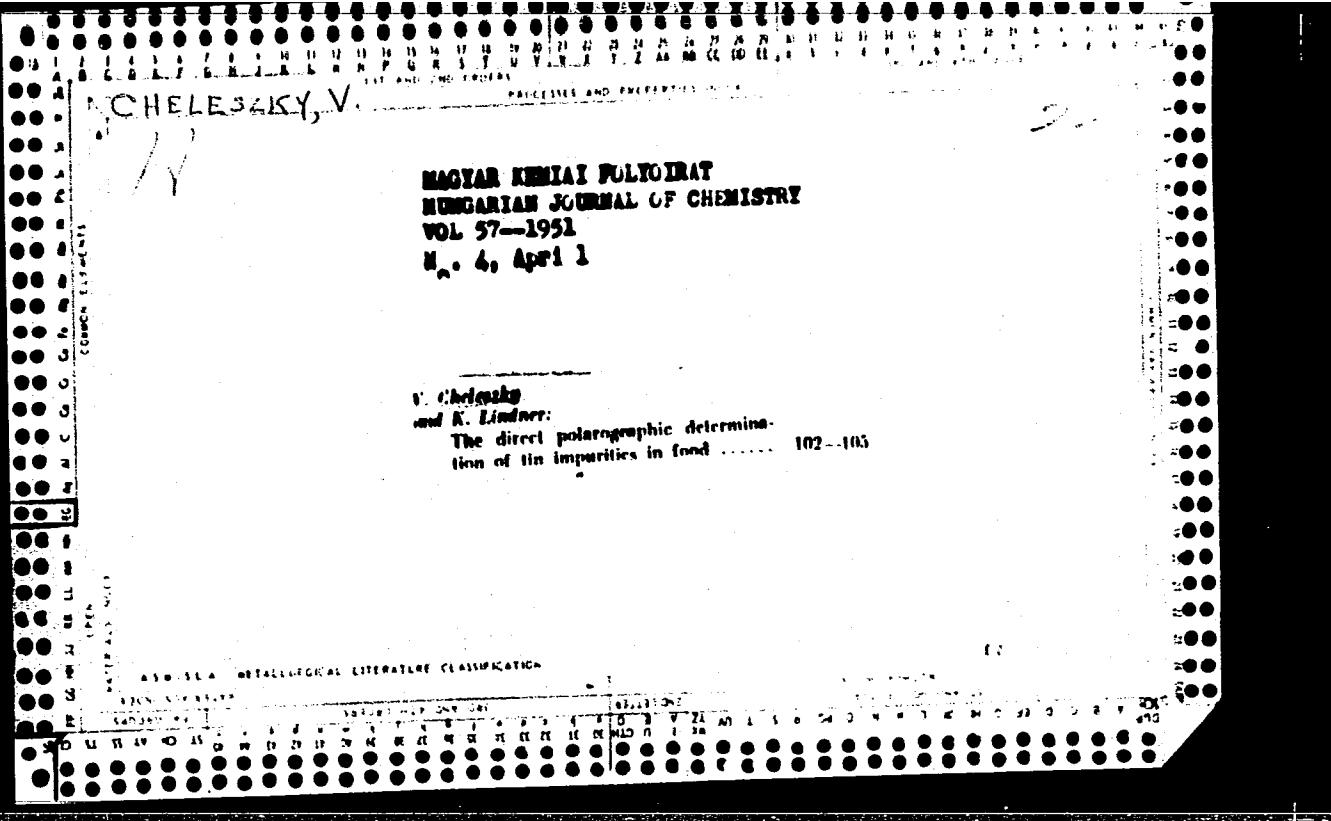
Attempts to obtain several cellular strains in vitro. II. Study
of strain C-1 EU (human placental chorion). Studii cercet. in-
framicrobiol. 15 no.6. 529-542 '64.

CHELESHCHEV, E. V.

Diffusion of Elements in Molten Iron. (In Russian.) B.V. Stark, E.V. Cheleshchev, and E.A. Kozachkov. Izvestiia Akademii Nauk SSSR, Section 66 Technical Sciences, Nov. 1951, p. 1689-1695.

An experimental study. Apparatus and method. Data are charted for diffusion of Mn and Si in Fe.
(Ni,Fe)

Immediate Source Clipping



KHETOVICH, V.L.; POPOV, M.P.; CHELEV, D.A.

Interaction of lipase and lipoxidase in the process of fat
oxidation. Izv.vys.ucheb.zav.;pishch.tekh. no.5:23-27 '58.
(MIRA 11:12)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promysh-
lennosti, kafedra biokhimii i zernovedeniya.
(Oils and fats, Edible) (Enzymes) (Oxidation)

POPOV, M.P.; CHELEYEV, D.A.

Studying lipoxidase in cereal crops in connection with the problem of
the development of rancidity in groats. Biokhim. zerna no.5:263-279
'60. (MIRA 14:5)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Lipoxidase) (Cereal products)

CHELIBONOVA, KH.

Bulgaria/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 1594

Author: Ivanov, Iv., Chelibonova, Kh.

Institution: None

Title: Syntheses with α - and β -naphthaldehydes and β -hydroxy- α -naphthaldehyde

Original
Periodical: Sintezi s α -i β -naftaldekhidi i β -oksi α -naftaldekhid, Nauch. tr. Viss. veterinarnomed. in-ta, 1954/1955, 3, 213-221; Bulgarian; Russian résumé

Abstract: α -naphthaldehyde (I), β -naphthaldehyde (II) and β -hydroxy- α -naphthaldehyde (III) react with chloralhydrate (IV) and NH_3 analogously to other aromatic aldehydes (Spasov, Aly, Ivanov, Iv., God. na Sofiyskiya un-t, 1941-1942, XXXIII, 2) with formation of $ArCH = NCH(OH)CCl_3$; Ar = α -naphthyl (V), Ar = β -naphthyl (VI) and Ar = β -hydroxy- α -naphthyl (VII). Mixture of 0.01 mol I, 0.01 mol IV and 6 ml C_6H_6 heated until IV is dissolved, cooled with

Card 1/2

Bulgaria Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61594

Abstract: stirring there are gradually added 2 ml 25% NH₃, yield of V 90%, MP 135-136° (from benzene). Analogously was prepared VI, yield 90% MP 175-176° (from benzene), and VII, MP 159-160° (from benzene). By heating 0.01 mol VII and 6 g (CH₃CO)₂O (VIII) (2 hours, 50-60°) prepared acetate of VII (with CH(OH)-group), MP 189-190° (from alcohol) the structure of which is proved by synthesis from β -acetoxy- α -naphthaldehyde and chloral ammonia in anhydrous ether. From 0.01 mol V, 0.04 mol anhydrous Na₂CO₃ in 25 g ether and 0.02 mol CH₃COCl in 5 g ether is obtained acetate of V, yield 0.8-1 g, MP 175-176° (from alcohol), which on stirring with 0.5 g VIII in 15 ml ether and 0.2 g water is converted to α -naphthylideneacetamide (IX), MP 220-250° (from alcohol), while with phthalic acid anhydride (X) it gives a mixed arylidenediacylamide, MP 188-189° (from alcohol). Analogously from 0.01 mol V and 0.02 mol C₆H₅COCl was synthesized the benzoate of V, MP 174-175° (from alcohol), which with X also forms a mixed arylidenediacylamide, MP 181-182° (from alcohol). IX is obtained on reacting VIII with V.

Card 2/2

CHELIBONOVА-LORER, Kh.

Metal complexes in living organisms. Priroda Bulg 10 no.6:33-36
161.

RADEV, T.; CHELIBONOVA-LORER, H.

Zinc content and carbonic anhydrase activity in the blood and
liver of chickens affected with erythroblastoses. Dokl. Bolg.
akad. nauk 16 no.4:437-440 '63.

(ZINC) (CARBONIC ANHYDRASE)
(BLOOD CHEMICAL ANALYSIS) (ENZYME TESTS)
(LIVER ENZYMOLOGY) (LEUKEMIA, EXPERIMENTAL)

CHELIBONOVА-LORER, Kh.; PANCHEVA-GOLOVINSKA, S.

Mucopolysaccharides and mucoproteins in living organisms.
Priroda Bulg 12 no. 1: 39-43 Ja-F '63.

CELIBONOVА-LORER, H. [Chelibonova-Lorer, Kh.]; GOLOVINSKA-PANCEVA, S.
[Golovinska-Pancheva, S.]; GOLOVINSKY, E. [Golovinski, E.]

Thiocanilides of the picolinic and isonicotinic acids, and their
influence on the sugar level in blood. Doklady BAN 16 no.1:
49-51 '63.

1. Vorgelegt von A. Spassov [Spasov, A.]. korр. Mitglied der
Akademie.

*

RADEV, T.; CHELIBONOVA-LORER, H. [Chelibonova-Lorer, Kh.]

Zinc content and carboanhydrase activity in the blood
and liver of chickens affected with erythroblastose.
Doklady BAN 16 no. 4:437-440 '63.

1. Institute of Comparative Pathology of Domestic Animals,
Bulgarian Academy of Sciences.

CHELIBONOVA-LORER, Kh.; PANCHEVA-GOLOVINSKA, S.

Penetration of substances through the cell membrane of organisms.
Prir i znanie 17 no.10:1-5 D '64.

CHELICHENKOVA, V.G., vrach

Pathogenesis and treatment of burns. Vop. travm. i ortop.
no.13:116-120 '63. (MIRA 18:2)

1. Travmatologicheskoye otdeleniye Sakhalinskoy oblastnoy
bol'niitsy.

L 31287-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/I/EWP(l)/EWP(v) DJ
ACC NR: AP6020246 SOURCE CODE: UR/0380/66/000/001/0059/0068

AUTHOR: Chelishchev, B. A. (Voronezh)

41
B

ORG: none

TITLE: Design of a pneumatic-hydraulic position drive

SOURCE: Mashinovedeniye, no. 1, 1966, 59-68

TOPIC TAGS: pneumatic device, hydraulic equipment, remote control system, conveying equipment

ABSTRACT: The Experimental Scientific Research Institute of Forge-Press Machine Building has developed and tested a pneumo-hydraulic positioner capable of moving a mass of up to 10,000 kg at rates variable from 0 to 20 cm/sec, then stopping it at any point desired. The device is remote controlled by transmission or pressure stabilization signals. This article describes the device, called the PGPP. The horizontal-movement device is actuated by compressed air at 4-6 kg/cm², and can be controlled within 0.5% of total movement range. Piston travel is up to 0.5 m. Diagrams demonstrate piston travel acceleration vs. load, indicating the amount of "hunting" which may occur in stopping the piston under load. Orig. art. has: 8 figures, 13 formulas, and 1 table. [PRS]

SUB CODE: 13/ SUBM DATE: 27Jun65/ ORIG REF: 005
Card 1/1 c/c UDC: 621.83+62-89

CHELIDZE, A., inzhener.

The KAZ-600 dump truck with side dumping. Avt.transp. № 9:24-25
S '56. (MLRA 9:11)

(Dump trucks)

CHELIDZE, D.G.

Opoka in the surrounding area of Kutaisi. Soob. AN Gruz. SSR
39 no. 25365-370 Ag '65. (MIRA 18:9)

CHELIDZE, D. G.

"Some Questions of the Investigation of the Tripping Mechanism of Silk Looms UAR-49 and ChGSP-50." Cand Tech Sci, Georgian Polytechnic Inst, Tbilisi, 1954. (R2aMekh, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

CHELIDZE, D.G.

Numerical forecasting of nocturnal temperature drop in a garden.
Meteor. i gidrol. no.2:13-19 F '65. (MIRA 18:3)

1. Gruzinskiy institut subtropicheskogo khozyaystva.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

CHELIIZE, D.G.

Genesis of opoka. Soob. AN Gruz. SSR 38 no.1:125-132 Ap '65.
(MIRA 18:12)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

CHELIDZE, G. F.

Def. at Tbilisi State U.

Consultative Committee on Languages

CHELIDZE, G.F.

A morphological characteristic of the shellfish Dreissensia.
Soob,AN Gruz.SSR 8 no.4:211-213 '47. (MIRA 9:?)

1.Akademiya nauk Gruzinskoy SSR, Energeticheskiy sektor, Tbilisi.
Predstavлено действител'ным членом Академии А.И.Джанелидзе.
(Shellfish, Fossil)

CHELIDZE, G.P.; DZHANELIDZE, A.I., deystvitel'nyy chlen.

Stratigraphy of Miocene deposits of anticlinal folds of Urta Mountain.
Soob. AN Gruz. SSR 14 no.1:19-25 '53. (MIRA 6:9)

1. Akademiya nauk Gruzinskoy SSR (for Dzhanelidze). 2. Akademiya nauk
Gruzinskoy SSR, Institut geologii i mineralogii, Tbilisi (for Chelidze).
(Urta Mountain--Folds (Geology) (Folds (Geology)--Urta Mountain)

CHELIDEE, G. F.; BELYANKIN, Dmitriy Stepanovich, akademik.

New data on the Pontiac fauna of the Black Sea- Caspian Sea region. Dokl.
AN SSSR 91 no.1:157-160 J1 '53. (MLRA 6:6)

1. Akademiya nauk SSSR (for Belyankin). 2. Institut geologii i mineralogii
Akademii nauk Grus. SSR. (Khobskii District--Paleontology)

CHELIADZE G.F.
CHELIDZE, G.F.

Pliocene deposits of Adzharia. Soob. AN Gruz. SSR 18 no.5:557-561
(MIRA 10:9)
Nv '57.

1. Akademiya nauk Grusinskoy SSR, Geologicheskiy institut, Tbilisi.
Predstavлено академиком I. V. Kacharava.
(Kobuleti District--Geology, Stratigraphic)

GAMKRELIDZE, P.D., otv.red.; GVAKHARIYA, G.V., red.; DZOTSENIDZE, G.S.,
red.; ZARIDZE, G.M., red.; KACHARAVA, I.V., red.; RUBINSHTEYN,
M.M., red.; TSAGARELI, A.L., red.; CHELIDZE, G.F., red.; CHIKHELIDZE,
S.S., red.

[Collection of papers in honor of Aleksandr Illarionovich
Dzhanelidze] Sbornik trudov: Akademiku Akademii nauk Gruzinskoi
SSR Aleksandru Illarionovichu Dzhanelidze k semidesiatiletiiu so
dnya rozhdeniya i piatidesiatiletiiu nauchno-pedagogicheskoi i
obshchestvennoi deiatel'nosti. Tbilisi, 1959. 490 p.

(MIRA 12:12)

1.. Akademiya nauk Gruzinskoy SSR, Tiflis. Geologicheskiy institut.
(Geology--Collections)
(Dzhanelidze, Aleksandr Illarionovich)

DVALI, T.K.; CHELIDZE, G.F., red.

[Catalog of the Monographic Museum] Katalog monografiche-
skogo muzeia. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR,
1961. 139 p. (MIRA 15:8)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Geologicheskiy
institut.
(Geological specimens—Collection and preservation)

SIDORENKO, A.V., glav. red.; GAMKRELIDZE, P.D., red.; DZOTSENIDZE,
G.S., red.; ZARIDZE, G.M.. red.; KACHAROVA, I.V., red.;
RUBINSHTEYN, M.M., red.; TSAGARELI, A.L., red.; CHELIDZE,
G.F., red.

[Geology of the U.S.S.R.] Geologija SSSR. Glav. red. A.V.
Sidorenko. Moskva, Nedra. Vol.10. Pt.1. 1964. 654 p.
(MIRA 17:12)

CHELIDZE, G.T.

USSR/Diseases of Farm Animals. Diseases Caused by R-1
Viruses and Rickettsiae

Abs Jour : Ref Zhur-Biol., No 1, 1958, 2751

Author : Kachakhidze A. V., Dzhamrulidze Ya E., Chelidze
G. T., Samadashvili D. N.

Inst : Georgian Scientific Research Veterinary Institute
Title : Dry Anti-Rabies Vaccine for Veterinary Practice

Orig Pub : Tr. Gruz. n-i vet. in-ta, 1955, 11, 267-269

Abstract : No abstract

Card 1/1

Country	: USSR	
Category	: Diseases of Farm Animals.	R
	Diseases Caused by Bacteria and Fungi.	
Abs. Jour.	: Ref Zhur-Biol., No 21, 1958, 96999	
Author	Dzhamrulidze, Ya. E.; Chelidze, G. T.	
Institut.	Georgian Scientific Research Institute of*	
Title	Some Problems of Fowl Tuberculosis and Its Control in Georgian SSR.	
Orig. Pub.	Byul. nauchno-tekhn. inform. gruz. n.-i. in-ta zhivotnovodstva i vet., 1957, No 2, 30-32	
Abstract	Fowl tuberculosis is widely spread in the Georgian SSR. The authors are of the opinion that basic measures for eradicating the disease should consist in isolated raising of the young stock, replacement of the entire stock on infested farms and performing a sanitary reconditioning of chicken yards and abandoning such yards and poultry-runs for 5-6 months during the spring-summer period.	
Card:	1/1	*Animal Husbandry and Veterinary Sciences.

CHELIDZE, I. A.

CHELIDZE, I. A.: "The Results of Studying the Pests of Dried Fruit and Measures to Combat Them." Published by the Acad Sci Georgian SSR. Inst of Plant Conservation, Acad Sci Georgian SSR. Tbilisi, 1956.
(Dissertation for the Degree of Candidate in Agricultural Science)

So: Knizhnaya Letopis', No. 19, 1956.

CHELIDZE, I.A., kand. sel'skokhoz. nauk

Smoke pots against granary pests. Zashch. rast. ot vred. i bol.
(MIRA 17:11)
9 no.9:15-16 '64.

1. Gruzinskiy institut zashchity rasteniy.

X
VINER, A.V.; NEKRASOV, A.M.; SYROMYATNIKOV, I.A.; VOZNESENSKIY, A.N.;
VASILENKO, P.I.; LAUPMAN, P.P.; TERMAN, I.A.; VINOGRADOV, N.P.;
ANTOSHIN, N.N.; ALEKSANDROV, B.K.; USPENSKIY, B.S.; KLASSON, I.R.;
KHEYFITS, M.E.; DRUTSKIY, V.F.; KRACHKOVSKIY, N.N.; POPOV, P.A.;
CHELIDZE, I.M.; FILARETOV, S.N.; KOZLOV, M.D.; BERLIN, V.Ya.;
~~GOLODOV, A.M.~~; GORDZIYEVICH, I.S.; PAK, V.P.; DORFMAN, S.M.;
DUBINSKIY, L.A.; UL'YANOV, S.A.; GRUDINSKIY, P.G.; KUVSHINSKIY, N.N.;
EMOLAEV, V.M.

Mikhail Mikhailovich Karpov. Elek.sta. 27 no.10:62 o '56. (MIRA 9:12)
(Karpov, Mikhail Mikhailovich, d.1956)

CHELIDZE, I.N.

Structure of lips and mucous membrane of the oral cavity in
little rabbits under the influence of radiation. Soob. AN
Gruz. SSR 31 no. 2:455-462 Ag '63. (MIRA 17:7)

CHELIDZE, L.N.

Structural state of the mucous membrane of the oral cavity in
rabbits under the influence of large doses of radiant energy.
Trudy Inst. eksp. morf. AN Gruz. SSR 11:273-278 '63.

(MIRA 17:11)

1. Kafedra patologicheskoy anatomii Tbilisskogo gosudarstvennogo
meditsinskogo instituta.

DOLIDZE, Zh.Sh.; CHELIDZE, L.T.

Geological history of the Hedara celehica. Ssob. AN Gruz.
SSR 31 no.1:89-94 J1 '63. (MERA 17:7)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

CHELIDZE, L.T.

Fossil flora of the Vale. Soob. AN GruzSSR 37 no.2:373-378 F '65.
(MIRA 18:3)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

CHELIDZE, L.T.

New data on the fossil flora of southern Georgia. Dokl. AN SSSR 162
no. 5:1145-1147 Je '65. (MIRA 18:7)

1. Institut paleobiologii AN GruzSSR.
Submitted March 3, 1965.

CHELIDZE, L.T.

New representatives of the fossil flora of the Caucasus.
AN Gruz. SSR 38 no. 3:587-589 Je '65. Soob.
(MIRA 18:12)

CHELDE, M.I

卷之三

Def. at Tbilisi State U.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

BUKHNIKASHVILI, A.V.; KEBULADZE, V.V.; CHELIDZE, T.L.; GUGUNAVA, G.Ye.

Electrotelluric surveying in eastern Georgia using long-period
variations. Trudy Inst. geofiz. AN Gruz. SSR 19:127-138 '60.
(MIRA 14:9)
(Georgia--Electric prospecting)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

CHELIIZE, T.L.

Frequency dependence of the electric properties of rocks.
Trudy Inst. geofiz. AN Gruz. SSR 21:161-173 '63.
(MIRA 18:12)

L 02278-67 EWT(l) IJP(g) AT

ACC NR: AP6025246

SOURCE CODE: UR/0057/66/036/007/1211/1214

74

72

B

AUTHOR: Besshaposhnikov,A.A.; Doroshenko,A.N.; Simonova,N.W.; Chelidze,T.Ye.

ORG: none

TITLE: Observation of "curved" spectrum lines in a pulsed high frequency plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1211-1214

21

TOPIC TAGS: hydrogen plasma, rotating plasma, plasma velocity, ion concentration, ion temperature, magnetic mirror, optic spectrum

ABSTRACT: The authors have spectroscopically observed the rotational velocities and the radial distributions and temperatures of impurity O⁺ and Si⁺⁺ ions in hydrogen plasma filaments. The plasmas were produced by a 1.5 MHz pulsed rotating dipole field in a 6.5 cm diameter 1 meter long glass tube containing hydrogen at from 0.02 to 0.25 mm Hg and were confined by a magnetic mirror system with a mirror ratio of 1.57 and a field strength in the uniform field region of 7.2 kOe. Additional stabilization was provided by an up to 216 cusped octupole field corresponding to a diameter of 2 cm. Two conditions of operation were distinguished: "direct rotation", in which the forces on the particles due to interaction of the high frequency currents in the plasma with the quasistatic field were directed toward the axis of the chamber, and "reverse rotation", in which those forces were directed toward the wall of the chamber. The OII 4649 Å and SIIII 4552 Å lines were observed with a spectrometer having a dispersion

Card 1/2

UDC: 533.9.07

L 02278-67

ACC NR: AP6025246

2

of 4 \AA/mm and a resolution of 0.1 \AA . The lines were very weak and were recorded with the aid of a multistage electron-optical image converter. The radial distributions of the ion concentrations were determined (in arbitrary units) from the relative intensities of the portions of the lines arising from different parts of the plasma filament, the radial distribution of the rotational velocity was determined from the Doppler shifts of different parts of the lines, and the temperatures of the impurity ions were also determined, presumably from the Doppler broadening. In direct rotation the impurity ion concentration decreased more or less monotonically from the axis to the periphery of the plasma filament; in reverse rotation the ion concentration increased with increasing distance from the axis, passed through a maximum, and then decreased toward the periphery. The rotational velocity was also maximum at some distance from the axis. The rotational velocity was of the order of 10^6 cm/sec at about 1 cm from the axis. The direct rotational velocities decreased with increasing octupole field strength, and the reverse rotational velocities increased with increase of the octupole field strength up to about 144 Oe and decreased with further increase of the octupole field strength. With increasing octupole field strength, the ion temperature decreased in direct rotation and increased in reverse rotation. Ion temperatures up to 20 (units not stated) were observed. The authors thank R.A.Demirkhanov and T.J.Gutkin for suggesting the problem and for their interest in the work. Orig. art. has: 5 figures and 1 table.

SUB CODE: 20

SUBM DATE: 02Aug65

ORIG. REF: 002 OTH REF: 004

Card 2/2 vmb

L 470-0-66 EM(1)/EMT(m)/FBI/SEC(k)-2/SWF(k)/P/EMF(t)/ATI IJP(c) WG/JD

ACC NR: AP6028628

SOURCE CODE: UR/0057/66/036/008/1506/1513

AUTHOR: Yevtushenko, T. P.; Zaydel', A. N.; Ostrovskaya, G. V.; Chelidze, T. Ya.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tehnicheskiy institut AN SSSR)

TITLE: Spectroscopy of a laser spark. 1. Spark in helium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 8, 1966, 1506-1513

TOPIC TAGS: nonlinear optics, laser induced breakdown, gas breakdown, helium, argon, hydrogen, air breakdown, laser beam, spectroscopy, laser radiation spectrum, spectrum analysis

ABSTRACT: Laser induced breakdown in pure and hydrogen-doped helium under pressures from 1 to 10 atm and in air and Ar-H₂ mixtures was investigated spectroscopically. The laser "spark" was generated by means of a 0.5-1.0-j giant pulse (30-40 nanosec) ruby laser which was Q-switched by means of a rotating prism. The laser beam was focused by means of an f:25 mm lens into a metal chamber equipped with quartz windows which could be filled with gases at pressures up to 10 atm. The spark could be observed in the direction perpendicular to the laser beam. The magnified (1.6 times) spark image was focused onto the slit of an ISP-51 spectrograph by means of a Jupiter-3 objective. Spectra obtained in this manner indicate the spatial distribution of the spark emission. The temporal distribution of the spark was observed by means of an SFR photorecorder. A spectral analysis of the laser-induced spark in an

Card 1/3

L 41090-66

ACC NR: AP6028628

He-H₂ mixture was made and photographs with the time resolution of various stages of the spark development were analyzed. The dependence of the H_β line halfwidth on the distance from the spark axis was shown. Tabulated data indicate the effect of pressure and the corresponding electron concentrations on linewidth broadening (see Table 1). The relative error of tabulated data was 20-30%. The preliminary results

Table 1. Linewidths in a laser spark spectrum in pure and hydrogen-doped helium at a pressure of 2 atm

Line, λ	$n_e \cdot 10^{19}$, cm ⁻³	Line, λ	$\Delta\lambda$	$n_e \cdot 10^{19}$, cm ⁻³
He I 6678	12	He I 4471	25	0.5
He I 5876	10	He II 4686	90	60
He I 5016	9	H _α	10	1.8
He I 4713	5	H _β	60	1.2

indicate that the spark plasma goes through two stages. During the first stage ($=100$ nanosec), the plasma has a high electron temperature and density ($\approx 10^{19}$ cm⁻³), during which an intensive continuous spectrum is emitted and a considerable line broadening of the neutral and ionized atom occurs. The second stage, which lasts tens of usec, corresponds to a gradual cooling of the plasma, during which only the neutral atoms radiate. The electron concentration in the initial development stage of a spark in He was found to be similar to that obtained for air breakdown elsewhere

Card 2/3

L 41090-66

ACC NR: AP6028628

(S. A. Ramsden and W. E. R. Davis, Phys. Rev. Lett., 13, 227, 1964 ($5 \cdot 10^{17} \text{ cm}^{-3}$);
and S. L. Mandel'shtam, P. P. Pashinin, A. V. Prikhinseyev, A. M. Prokhorov, and N. K.
Sukhodrev, ZhETF, 47, 2003, 1964). A refined treatment of the present work will
appear shortly. Orig. art. has: 7 figures and 2 tables. [YK]

SUB CODE: 20 / SUBM DATE: 22Mar66 / ORIG REF: 002 / OTH REF: 003 / ATD PRESS: 5057

Card 3/3 hs

L 20197-66 FBD/ENT(1)/EEC(k)-2/T/EWP(k)/EWA(h) IJP(c) WE
ACC NR: AP6007027 SOURCE CODE: UR/0051/66/020/002/0374/0375

AUTHOR: Malyshев, G. M.; Ostrovskaya, G. V.; Chelidze, T. Ya.

ORG: none

TITLE: Shadow projections of an air spark generated by focusing a laser beam

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 374-375

TOPIC TAGS: shadowgraph photography, laser photography, laser R and D, spark camera

ABSTRACT: The authors use the method of shadow projections for photographing a spark produced by focusing a laser beam in air. The shadow projections were photographed in the light emitted by the laser which produced the spark. A delay line was used for taking photographs at various times. A diagram of the experimental setup is shown in Fig. 1. A beam of light 1 from a pulsed ruby laser (energy 0.5 joules, duration 50 nsec) was passed through plane-parallel plate 2 and focused by lens 3 ($f = 25$ mm). The part of the beam reflected from the front surface of plate 2 was used for producing the shadow photographs. Iris 4 with a diameter of 10 mm was us-

UDC: 621.375.9 : 535.004.14

Card 1/3

L 20197-66

ACC NR: AP6007027

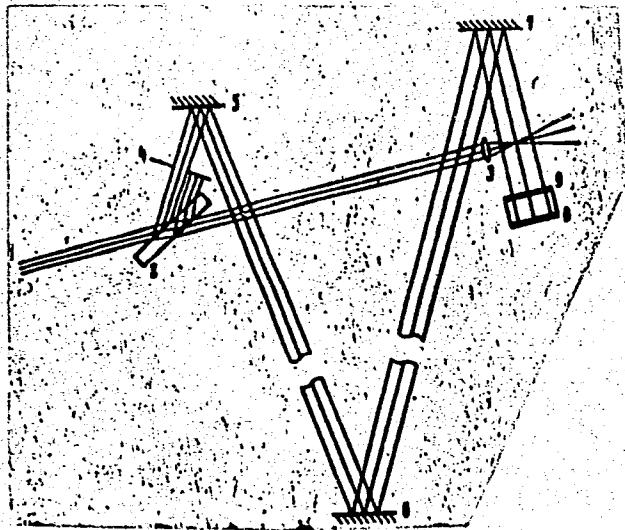


Fig. 1. Experimental setup

Card 2/3

L 20197-66
ACC NR: AP6007027

ed for blocking out the light from the back surface of the plate. After reflection from mirrors 5, 6, and 7 the light passed through the spark and exposed photographic plate 8, which was protected from daylight fogging by red filter 9. Time delay of the light beam was adjusted by moving mirror 6. The photographs show clearly defined bands surrounding the shadow from the spark plasma. Since the laser emission is nearly totally absorbed by the spark plasma, these bands may be considered a diffraction pattern and the distance between maxima may be used for determining the dimensions of the plasma. Tabulated measurements show that the plasma expands at a rate of about 10^6 cm/sec in the first 100 nsec. "The authors are sincerely grateful to V. V. Semenov and T. P. Yevtushenko who helped in setting up the giant pulse equipment, as well as to A. N. Zaydel' for assistance in the work and discussion of the results." Orig. art. has: 2 figures, 1 table. [14]

SUB CODE: 14, 20SUBM DATE: 14Ju165/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS:

4214

Card 3/3

ACC NR: AP7001321

SOURCE CODE: UR/0057/66/036/012/2208/2210

AUTHOR: Zaydel', A. N.; Ostrovskaya, G. V.; Ostrovskiy, Yu. I.; Chelidze, T. Ya.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tehnicheskiy institut AN SSSR)

TITLE: Holography of a laser spark with a temporal resolution

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2208-2210

TOPIC TAGS: holography, laser photography, plasma photography, Schlieren photography

ABSTRACT: Shadowgraphs of laser-induced air breakdown were taken by means of the 3-beam setup shown in Fig. 1, using a method of spatial-temporal separation of light pulses employing a system of semitransparent mirrors patented by one of the authors in 1963. Shadowgraphs can be made of various stages in the development of a single discharge. The shadowgraphs can be considered Gabor holograms of a laser spark. Image reconstruction was carried out by means of the system shown in Fig. 2. This system is actually a Schlieren setup in which the image is formed by rays deflected by the phase inhomogeneities of the object. The electron concentration N_e in a plasma was determined experimentally for different stages in the development of a plasma during two discharges. The average N_e for the first 120 nanosec (accuracy 30—50%) was $2.4 \times 10^{19} \text{ cm}^{-3}$, which agrees favorably with results obtained from 1) displacement of the interference bands (A. Alcock, E. Panarella, S. Ramsden, 7th Intern. Conf.

Card 1/3

UDC: 533.9.07

ACC NR: AP7001321

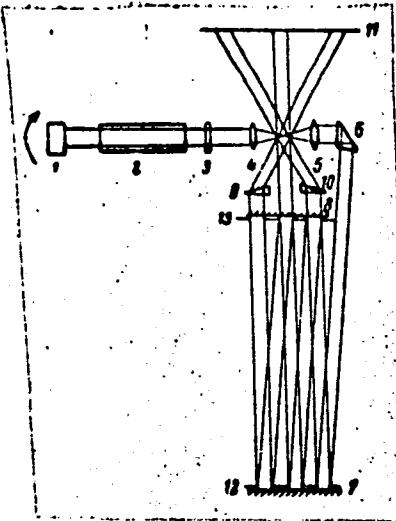


Fig. 1. Setup for obtaining shadowgraphs

1 - Rotating prism Q-switch; 2 - ruby crystal; 3 - glass plate; 4,5 - lenses; 6 - prism; 7 - mirror (99% reflective at 6943 Å); 8 - mirror (50% reflective); 9, 10 - optical glass wedges; 11 - film; 12, 13 - diaphragms.

Card 2/3

ACC NR: AP7001321

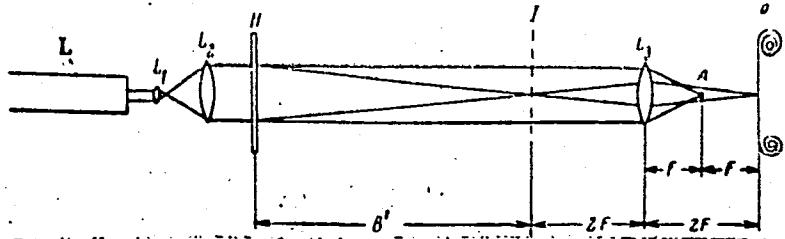


Fig. 2. Schematic for hologram reconstruction

H - hologram; L_1, L_2 - diverging lenses; L - He-Ne laser (6328 Å); I - image (real); L_3 - converging lens; P - film.

on Phenomena in Ionized Cases, 1965) and 2) a scattered laser beam (S. Ramsden, W. Davies, Phys. Rev. Letts., 13, 227, 1964). Orig. art. has: 2 formulas and 4 figures.

[YK]

SUB CODE: 20/ SUBM DATE: 18May66/ ORIG REF: 003/ OTH REF: 006/ ATD PRESS: 5110

Card 3/3

CHELIDZE, V. G.

O neobkhodimom i dostatochnom usloviu zhodimosti dvoynogo trigonometricheskogo ryada Fourier-Lebesgue'a funktsii ot dvukh peremennykh s integriruyemym kvadratom. Tbilisi, Trudy matem. in-ta Gr. fil. AII, 6 (1939) 97-124.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Chelidze, V. G. A theorem on double power series. [C.R.
(Doklady) Acad. Sci. URSS (N.S.) 53, 691-694 (1946).]

Let $\sum a_{\mu}$ be a double series with partial sums S_{mn} convergent to S . Let $S_{mn}/m \rightarrow 0$ for each n ; let $S_{mn}/n \rightarrow 0$ for each m and let $S_{mn}/mn \rightarrow 0$ as $m, n \rightarrow \infty$. Let $\lambda > 1$. Then the double series in $f(x, y) = \sum_{\mu} a_{\mu} x^{\mu} y^{\mu}$ converges absolutely when $|x| < 1$, $|y| < 1$, and defines a function $f(x, y)$ such that $f(x, y) \rightarrow S$ as $x \rightarrow 1$, $y \rightarrow 1$ subject to the restrictions

$0 < x < 1$, $0 < y < 1$ and $\lambda^{-1} < (1-x)/(1-y) < \lambda$.

The hypothesis that $S_{mn}/n \rightarrow 0$ for each m cannot be replaced by the hypothesis that $|S_{mn}| \leq n+1$; this is shown by consideration of the series $\sum a_{\mu}$ leading to the function $f(x, y) = (1-x)/(1-y)$. The restriction $\lambda^{-1} < (1-x)/(1-y) < \lambda$ cannot be removed from the conclusion of the theorem; this is shown by consideration of the series $\sum a_{\mu}$ for which $a_{k,k} = (k+1)^{k+1} - k!$, $k = 0, 1, 2, \dots$; $a_{1,k} = -a_{k,1}$, and $a_{\mu} = 0$ when $j > 1$. R. P. Agnew.

Source: Mathematical Reviews, 1948, Vol 9, No. 2

Chelidze, V. G. On the absolute convergence of double Fourier series. *C. R. (Doklady) Acad. Sci. URSS (N.S.)* 54, 117-120 (1946).

Let $f(x, y)$ be a periodic function of the two variables x, y . Under the conditions

$$\begin{aligned} |f(x_1, y) - f(x_2, y)| &\leq H(y) |x_1 - x_2|^\alpha, \\ |f(x, y_1) - f(x, y_2)| &\leq K(x) |y_1 - y_2|^\beta, \\ |f(x_1, y_1) - f(x_1, y_2) + f(x_2, y_1) - f(x_2, y_2)| &\leq C |x_1 - x_2|^\gamma |y_1 - y_2|^\delta, \end{aligned}$$

with $H(y) \leq L$, $K(x) \leq L$, C constant and $\alpha, \beta, \gamma, \delta$ all greater than $\frac{1}{2}$, the author proves the absolute convergence of the double Fourier series of f , thus extending to two variables the well-known theorem of S. Bernstein.

R. Salem.

Source: Mathematical Reviews,

Vol. 3 No. 7

CHELIDZE, V. G.

3
88
0

Celidze, V. G. Cesaro summability of double numerical series. Soobshcheniya Akad. Nauk Gruzin. SSR. 8, 121-126 (1947). (Russian)

Let $\sum a_{j,k}$ be a double series converging to s and having partial sums $s_{m,n} = \sum_{j=0}^m \sum_{k=0}^n a_{j,k}$ such that (i) for each n , $s_{m,n}/m \rightarrow 0$ as $m \rightarrow \infty$ and (ii) for each m , $s_{m,n}/n \rightarrow 0$ as $n \rightarrow \infty$. Then the series is restrictedly evaluable $C_{1,1}$ to s . In this connection, see Celidze [Doklady Akad. Nauk SSSR 60, 553-554 (1948); these Rev. 9, 507] and references given in the review.

R. P. Agnew (Ithaca, N. Y.)

Source: Mathematical Reviews,
V. A. Rabinovitz and Shatzky, Vol. 13 No. 9
R. P. Agnew (Ithaca, N. Y.)

CHELIDZE, V.G.

330

Celidze, V. G. The mutual relation between Cesàro and Abel summation of double series. Soobshcheniya Akad. Nauk Gruzin. SSR. 8, 365-372 (1947). (Russian)

It is proved that if $\sum a_{i,j}$ is a series whose $C_{i,j}$ transform $\sigma_{m,n}$ converges to s and if

$$\lim_{m \rightarrow \infty} \sigma_{m,n}/(m+1)^2 = 0, \quad \lim_{n \rightarrow \infty} \sigma_{m,n}/(n+1)^2 = 0,$$

then $\sum a_{i,j}$ is restrictedly evaluable to S by the Abel method. This result, and an application of it, were reviewed in greater detail [Celidze, Doklady Akad. Nauk. SSSR 60, 553-554 (1948); these Rev. 9, 507] when the present paper was not available to Math. Rev. R. P. Agnew.

SOURCE: Mathematical Reviews.

Vol 13 No. 9

(f.m) 002

CHELIDZE, V.G.

- Celidze, V. G. *Borel summation of double series*. Soobshcheniya Akad. Nauk Gruzii. SSR. 8, 501-508 (1947). (Russian)
- Celidze, V. G. *Linear transformations of double numerical sequences*. Soobshcheniya Akad. Nauk Gruzii. SSR. 9, 333-339 (1948). (Russian)
- Celidze, V. G. *On generalized Abel summability of double series*. Soobshcheniya Akad. Nauk Gruzii. SSR. 9, 457-462 (1948). (Russian)

Celidze, V. G. *The summability of double series*. Akad. Nauk Gruzii. SSR. Trudy Tbiliss. Mat. Inst. Razmadze 16, 1-37 (1948). (Georgian. Russian summary)

These four papers treat special problems in the theory of transformations of double sequences, that arise because of the following fact. A double sequence s_{λ} may be convergent to s in the sense of Pringsheim (that is, $\lim_{N \rightarrow \infty} s_{\lambda, N} = s$) and nevertheless have a nonempty finite set of unbounded rows and columns. Let A be a sequence-to-sequence transformation of the form $\sigma_{\alpha\beta} = \sum_{i,j} a_{ij} s_{i,j}$, or a sequence-to-function transformation $\sigma(t, x) = \sum_{i,j} a_{ij} f_i(t, x) s_{i,j}$. In each paper A is one of the transformations of Cesaro, Abel, and Borel, or is a more general transformation satisfying specified conditions. The results are of the following type. Let s_{λ} converge to s , and let each row and column of s_{λ} satisfy a stated condition (depending upon the transformation A being considered) which restricts the absolute values of the elements but does not require that they be uniformly bounded. It is then shown that the transform must converge restrictedly (in the sense of C. N. Moore) to s . The conclusion means, in the case of a sequence transform $\sigma_{\alpha\beta}$, that if $\lambda > 1$ and $\epsilon > 0$, then there is an index N such that $|s_{\alpha\beta} - s| < \epsilon$ whenever $\alpha, \beta > N$ and $\lambda^{-1} < \alpha/\beta < \lambda$. In the case of the function transform, the meaning is analogous.

R. P. Agnew (Ithaca, N. Y.).

Vol XIV No 2, Feb 1972

Ilichai Nakh
Inst. im
A. M. Razmedze
AS Gru SSR

CELEIDZE, V. G. Double Denjoy Integrals. Akad. Nauk Gruzin. SSR. Trudy Tbiliss. Mat. Inst. Razmadze 15, 155-242 (1947). (Russian. Georgian summary) The extensions of the Denjoy integral to functions of two variables, given by Looman, Krzyzanski, Kempisty, and Romanowski, deal with the so-called \mathcal{D} -integral in the restricted sense, so that the integrand is the ordinary derivative of its integral almost everywhere (Kempisty considers regular derivatives, Looman considers strong derivatives). The author develops the corresponding theory of double Denjoy integrals in the wide sense, so that in his case the integrand is the approximate derivative of the integral a.e.

The function $F(x, y)$ defined on a 2-dimensional interval R_0 is said to be absolutely continuous (AC) on the set $E \subset R_0$ if given $\epsilon > 0$ there is an $\eta > 0$ such that if r_1, \dots, r_n is a system of non-overlapping intervals such that each r_i has two opposite end-points belonging to E , then $\sum |r_i| < \eta$ implies $\sum |\Delta(F, r_i)| < \epsilon$, where $\Delta(F, r_i)$ is the increment of F on r_i . If the r_i are required to have all their end-points belonging to E , then F is said to be AC in the wide sense on E . $F(x, y)$ is ACG on E if $E = \sum E_n$ and F is AC on each E_n . The author proves the following results: If $F(x, y)$ is continuous on R_0 and ACG in the wide sense on the set $E \subset R_0$, then F has an approximate derivative $D_{\text{ap}} F(x, y)$ a.e. on E . If $F(x, y)$ is continuous and ACG on R_0 , then $D_{\text{ap}} F(x, y) \geq 0$ a.e. on R_0 implies $\Delta(F, R_0) \geq 0$. There are functions AC in the sense of the author and not in the sense of Kempisty. If the regular derivatives $Df(x, y)$ and $Df(x, y)$ are finite on R_0 outside of a denumerable set of lines parallel to the axes, then F is ACG on R_0 . A function $f(x, y)$ is said to be (\mathcal{D}) -integrable on R_0 if there exists a continuous ACG function $F(x, y)$ such that $D_{\text{ap}} F(x, y) = f(x, y)$ a.e. The properties of the ordinary Denjoy integral hold for this double Denjoy integral. The paper contains many other results too numerous to be quoted here.

M. Collar (Buenos Aires).

SO: MATHEMATICAL REVIEW (Unclassified)
Vol XIV No 8, September 1953, pp 713-730

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3

CHELIDZE, V. G.

Chelidze, V. G. "On the generalized Abel summability of double series," Soobshch. Akad. nauk Gruz. SSR, 1943, No. 8, p. 457-62

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308320002-3"

CHELIDZE, V. G.

Chelidze, V. G. - "On the double transformation of a function of two variables",
Sooobshch. Akad. nauk Gruz. SSR, 1948, Nos. 9-10, p. 521-25.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

Celidze, V. G. On the extension of a theorem of Bochner to double series. Doklady Akad. Nauk SSSR (N.S.) 60, 553-554 (1948). (Russian)

Let $\lambda \geq 1$. A double series $\sum a_{ij}$ is summable A_λ to s if the series in

$$(1) \quad f(z, y) = \sum_{j=0}^{\infty} \sum_{i=0}^{\infty} a_{ij} z^i y^j$$

converges absolutely when $|z| < 1$, $|y| < 1$ and defines a function $f(z, y)$ such that $f(x, y) \rightarrow s$ as $(x, y) \rightarrow (1, 1)$ subject to the restrictions $0 < x < 1$, $0 < y < 1$, and $x^{-1} + y^{-1} \leq \lambda$.

Let

$$(2) \quad s_{mn} = \sum_{j=0}^m \sum_{i=0}^n a_{ij}; \quad \sigma_{mn} = \frac{1}{(m+1)(n+1)} \sum_{j=0}^m \sum_{i=0}^n s_{jn}$$

I. I. Ogieveckii [same Doklady (N.S.) 58, 1897-1900 (1947); these Rev. 9, 278] proved that if σ_{mn} converges to s and

$$(3) \quad \limsup_{m \rightarrow \infty} |s_{mn}| / (m+1) < \infty, \quad \limsup_{n \rightarrow \infty} |s_{mn}| / (n+1) < \infty,$$

for each n and m , respectively, then $\sum a_{ij}$ is summable A_λ to s . The author, in a paper unavailable to the reviewer, proved that if σ_{mn} converges to s and

$$(4) \quad \lim_{m \rightarrow \infty} \sigma_{mn} / (m+1)^2 = 0, \quad \lim_{n \rightarrow \infty} \sigma_{mn} / (n+1)^2 = 0,$$

then $\sum a_{ij}$ is summable A_λ to s .

This note shows very simply that if $\sigma_{mn} \rightarrow s$, then (3) implies (4) and hence that the theorem of Ogieveckii is a corollary of that of Celidze. An example disproves the converse; the theorem of Celidze is the stronger of the two. [For other work along these lines, see J. C. Vignaux, Ann. Soc. Ci. Argentina 126, 321-344, 401-428 (1938); 127, 161-185 (1939); 140, 134-135 (1945), and references given there.]

R. P. Agnew (Ithaca, N. Y.).

Source: Mathematical Reviews,

Vol. No.

C_AELIDZE, V. G.

Celidze, V. G. Integral transforms of functions of two variables. Akad. Nauk Gruzin. SSR. Trudy Mat. Inst. Razmadze 18, 93-113 (1951). (Russian. Georgian summary)

Integrals over finite intervals being Lebesgue integrals, and integrals over a quarter-plane being limits of these, the transformations treated have the form

$$(1) \quad F(x, y) = \int_0^\infty \int_0^\infty K(x, y, t, u) \Phi(t, u) dt du.$$

Let $\varphi(t, u)$ be increasing over $0 \leq t, u < \infty$, let $\varphi(0, 0) = 1$, and let $\varphi(t, u) \rightarrow \infty$ as $t+u \rightarrow \infty$. Let A_φ be the class of functions $\Phi(t, u)$ which are bounded and measurable over each finite square $0 \leq t, u \leq a$ and such that $\Phi(t, u)/\varphi(t, u) \rightarrow 0$ as $t+u \rightarrow \infty$. Let K_φ denote the class of kernels $K(x, y, t, u)$, defined over $0 < x, y < 1, 0 \leq t, u < \infty$, such that $F(x, y)$ exists when $\lambda^{-1} < y/x < \lambda$ and $F(x, y) \rightarrow L$ under the condition $\lambda^{-1} < x/y < \lambda$ and $x, y \rightarrow 0$ whenever $\Phi(t, u)$ belongs to class A_φ and $\Phi(t, u) \rightarrow L$ as $t, u \rightarrow \infty$. The author gives four conditions on K which are said to be necessary and sufficient for K to belong to K_φ . The conditions are

MATHEMATICAL REVIEWS (uncle
Vol. 14, No. 7, July-Aug. 1)

$$(2) \quad \lim_{x, y \rightarrow 0}^{(\lambda)} \int_0^\infty \int_0^\infty K(x, y, t, u) dt du = 1,$$

$$(3) \quad \lim_{x, y \rightarrow 0}^{(\lambda)} \int_0^a dt \int_0^\infty |K(x, y, t, u)| \varphi(a, u) du = 0, \quad a > 0,$$

$$(4) \quad \lim_{x, y \rightarrow 0}^{(\lambda)} \int_0^b du \int_0^\infty |K(x, y, t, u)| \varphi(t, b) dt = 0, \quad b > 0,$$

and, for some constant M ,

$$(5) \quad \int_0^\infty \int_0^\infty |K(x, y, t, u)| dt du < M, \quad \lambda^{-1} < y/\alpha < \lambda,$$

where $\lim_{x, y \rightarrow 0}^{(\lambda)}$ means that $x, y \rightarrow 0$ under the restriction $\lambda^{-1} < y/x < \lambda$.

The long argument in support of Lemma 6, which purports to establish the necessity of the conditions (3) and (4), is incomplete at the bottom of page 98 where a formula is given and used without proof. That this formula is incorrect, and that the conditions (3) and (4) are in fact not necessary, is established by the following example. Let, when $0 < x, y < 1$,

$$(6) \quad F(x, y) = F_1(x, y) + F_2(x, y)$$

where

$$(7) \quad F_1(x, y) = \int_0^1 \int_0^1 e^{i(x^{-1}t+y^{-1}u)} \Phi(t, u) dt du$$

and

$$(8) \quad F_2(x, y) = \int_{x^{-1}}^{x^{-1}+1} \int_{y^{-1}}^{y^{-1}+1} \Phi(t, u) dt du.$$

GELIDZE, V. G.

SO: MATHEMATICS

Vol. 11,

(unclassified)

Aug. 1953, pp.609-712.

If $\Phi(t, u)$ is Lebesgue integrable over the unit square $0 \leq t, u \leq 1$, then the Riemann-Lebesgue theorem implies that $F_1(x, y) \rightarrow 0$ as $x, y \rightarrow 0$; and if $\Phi(t, u)$ is measurable and $\Phi(t, u) \rightarrow L$ as $u, v \rightarrow \infty$, then $F_2(x, y) \rightarrow L$ as $x, y \rightarrow 0$. Thus if $\Phi(t, u)$ belongs to the class A , and if $\Phi(t, u) \rightarrow L$ as $t, u \rightarrow \infty$, then $F(x, y) \rightarrow L$ as $x, y \rightarrow 0$ and hence also $F(x, y) \rightarrow 0$ as $x, y \rightarrow 0$ restricted by the condition $\lambda^{-1} < y/x < \lambda$. Therefore the kernel K of the transformation (6) belongs to the class K . But for this kernel we have $|K(x, y, t, u)| = 1$ when $0 \leq t, u \leq 1$ and hence, since $\varphi(t, u) \geq 1$,

$$(9) \quad \int_0^1 dt \int_0^1 |K(x, y, t, u)| \varphi(a, u) du \geq 1$$

whenever $0 < x, y < 1$. Thus (3) fails to hold, and a formula similar to (9) shows that (4) fails to hold.

The paper contains three more theorems similar to that discussed above, and each of them involves the same error. It seems to the reviewer that the author's long argument that involves the errors can be modified to prove necessity of conditions such as

$$\lim_{x \rightarrow 0} \lim_{y \rightarrow 0} \sup^{(n)} \int_0^a du \int_b^\infty |K(x, y, u, v)| \varphi(u, v) dv = 0,$$

but the reviewer does not assume responsibility for supplying sets of necessary and sufficient conditions to replace (2), (3), (4), and (5).

R. P. Agnew (Ithaca, N. Y.).

CIA-RDP86-00513R000308320002-3

CHERLIDZE, V.G.

Multiplication of double series and of double integrals. Trudy
Tbil.mat.inst. 19:135-151 '53. (MLRA 7:8)

1. Tbilisskiy Gosudarstvennyy Universitet im. Stalina i Mate-
maticscheskiy Institut im. A.N.Razmadze.
(Series) (Integrals, Multiple)

CHEBLIDZE, V.G.

Summation of double integrals. Trudy Tbil.mat.inst. 20:
131-143 '54. (MIR 8:8)
(Integrals, Multiple)

CHELIDZE, V.G.

$C_\alpha \beta$ and A-integrability of functions of two variables. Trudy Tbil.
mat.inst.no.21:65-76 '55.
(Integrals) (Functions of several variables)

(MLRA 9:7)

Chelidze, V.G.

VAL'FISH, A.Z., redaktor; MANDZHAVIDZE, G.F., redaktor; MIKELADZE, Sh.Ye.,
redaktor; MUSKHELISHVILI, N.I., otvetstvennyy redaktor; CHELIDZE, V.G.,
redaktor; CHOGOSHVILI, G.S., redaktor; KAHACHIKOV, S.R., tekhnicheskyy
redaktor.

[Linear discontinuous boundary problems of the function theory,
singular integral equations and some of their applications] Lineinyye
rasryvnye granichnye zadachi teorii funktsii, singuliarnye integral'nye
uravneniya i nekotorye ikh prilozheniya. Tiflis, Izd-vo Akademii nauk
Gruz.SSR, 1956. 158 p. (Akademia nauk Gruz.SSR. Matematicheskii institut.
Trudy, vol. 23)

(MLRA 10:5)

(Functions. Discontinuous)
(Integral equations)
(Functions of complex variables)

CHELIDZE, V. G.

Call Nr: AF 110825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp. Mention is made of Kreyn, M. G.

There are 3 references, 2 of which are USSR, and 1 English.

Chebotarev, G. N. (Kazan'). Some Matrix Equations and Their Application for Solving in Closed Form Riemann Boundary Problem for Pair Function Systems and for Solving of Systems of Linear Differential Equations. 110-111

Chelidze, V. G. (Tbilisi). Some Summation Methods of Multiple Series. 111

Chibrikova, L. I. (Kazan'). On Riemann Boundary Problem of Automorphic Functions. 111

Shaginyan, A. L. (Yerevan). The Velocity of Polynomial Approximation on a Closed Set. 111-112

Mention is made of Lavrent'yev, M. A.

There is 1 USSR reference.

Card 35/80

16(1)

AUTHOR:

Chelidze, V.G.

SOV/155-58-2-19/47

TITLE:

On Tauberian Theorems for Double Series (O teoremaakh tauberova
tipa dlya dvoynykh ryadov)PERIODICAL: Nauchnyye doklady vysshyey shkoly. Fiziko-matematicheskiye nauki,
1958, Nr 2, pp 91-95 (USSR)ABSTRACT: The author considers real double series $\sum_{i,k=0}^{\infty} a_{ik}$ with real
terms. He generalizes two older well-known theorems of Knopp
and a modern result of Ogiyevetskiy [Ref 2] on the equivalence
of the A- and the C-summabilities and similar questions. The
paper contains five definitions and four theorems, only the first
of which is proved.
There are 2 references, 1 of which is Soviet, and 1 German.ASSOCIATION: Tbilisskiy gosudarstvennyy universitet imeni I.V.Stalina
(Tbilisi State University imeni I.V.Stalin)

SUBMITTED: February 2, 1958

Card 1/1

25001

S/044/61/000/003/002/014
C111/C33316.4000

AUTHOR:

Chelidze, V. G.

TITLE:

On summation of multiple integrals

PERIODICAL: Referativnyy zhurnal, Matematika, no. 3, 1961, 2, abstract
3B7. (Tr. Tbilissk. matem. in-ta. AN Gruz SSR, 1959,
26, 75-90)TEXT: The notion of quasipositive kernel is generalized to the two-dimensional case. Such a kernel $K(x,y,t,\tau)$ is called by the author a kernel of the class T. For every point $(x,y) \in Q = (0 < x < a, 0 < y < b)$ it is

$$\iint_R |K(x,y,t,\tau)| dt d\tau < M$$

where $R = [0 < t < \infty, 0 < \tau < \infty]$. $K(x,y,t,\tau)$ for $x,y \rightarrow 0$ possesses properties which are analogous to those of a quasipositive kernel in the unidimension case. Conditions are given under which from $\lim_{t,\tau \rightarrow \infty} \Phi(t,\tau) = S$ it follows that

Card 1/5

25001
On summation of multiple integrals

S/044/61/000/003/002/014
C111/C333

$$\lim_{x,y \rightarrow +0} \iint_R K(x,y,t,\tau) \Phi(t,\tau) dt d\tau = S.$$

Furthermore there are given three concrete summation methods; general properties of the kernels of class T are used for their investigation. The number S is called the $C_{\alpha,\beta}$ -integral of the function $f(t,\tau)$ over the domain R, if

$$\lim_{x,y \rightarrow \infty} \iint_{0,0}^{x,y} \left(1 - \frac{t}{x}\right)^{\alpha} \left(1 - \frac{\tau}{y}\right)^{\beta} f(t,\tau) dt d\tau = S.$$

It is shown that under certain additional conditions from the $C_{\alpha,\beta}$ -integrability of $f(t,\tau)$ it follows its $C_{\alpha',\beta'}$ -integrability, where $\alpha' > \alpha$, $\beta' > \beta$. The number S is called A-integral of the function $f(t,\tau)$ over the domain R, if

Card 2/5